Cascade - Product Requirements Document (PRD)

Version: 1.0.0
Status: For Approval
Authors: Uy, Charles Joshua & Diesta, Edward Joshua

Table of Contents

1. Overview

1.1 Document Purpose

The purpose of this Product Requirements Document (PRD) is to define the scope, features, and requirements for the "Cascade" web application. It serves as the central source of truth for the development team throughout the design and development lifecycle, ensuring that everyone is on the same page.

1.2 Vision

Cascade is a web-based workflow and document management platform designed for Akiva Holdings and its subsidiary Business Units (BUs). Its purpose is to digitize, streamline, and standardize the creation, approval, and management of internal documents. By replacing the current manual, paper-based system, Cascade will eliminate physical bottlenecks, increase operational efficiency, provide management with real-time visibility, and create a secure, centralized digital archive of all processed documents.

1.3 Problem Statement

Akiva Holdings currently operates 5 subsidiary BUs at the same time, each with its own internal processes. The current system for handling critical documents like requisitions is entirely manual, leading to significant challenges:

- Inefficiency & Delays: The process relies on hard-copy documents and "wet signatures," which are physically transported between branches and to headquarters. This is slow and creates severe bottlenecks, especially when key approvers are traveling or unavailable.
- Lack of Visibility: It is extremely difficult for management or initiators to track the real-time status of a document. Finding out where a request is "stuck" requires manual follow-ups via phone, Facebook Messenger, or Google Chat.
- Error-Prone & Inconsistent: Manual processes are susceptible to human error, lost documents, and inconsistent application of rules across different BUs. This lack of standardization makes auditing and reporting difficult.
- Complex Workflows: The process is not always linear. Workflows often require the compilation and chaining of documents.

2. Goals & Objectives

2.1 Business Goals

- Decrease the time it takes for forms to complete their approval lifecycle.
- Enhance transparency and accountability for a form's live status and bottlenecks.
- Build a foundation for the standardization of forms and processes across different BUs.

2.2 Product Objectives

- Digitize form creation and approval workflows for different kinds of users
- Support complex and chained approval workflows
- Support data exporting to easily integrate with Akiva's existing SYSPRO ERP System

3. User Personas

In this section, the different kinds of roles are listed down to discuss what their potential needs are in the approval process. However, this also means that in the real life scenario it is possible for a single person to hold multiple of these roles (e.g. initiator for some forms and approver for other forms).

3.1 The Initiator

Core Responsibility: To start a new process by creating the first document in a workflow.
Key Needs:

- Request Creation: Quickly find the correct form, fill it out with clear instructions, and attach supporting documents (e.g., invoices, photos, receipts).
- Status Transparency: Easily track the real-time status of their submitted requests from a personal dashboard.
- Clear Communication: Receive automated notifications if their request is approved, rejected, or requires more information.
- Simple Revisions: The ability to directly respond to clarification requests via a built in commenting system and edit a rejected form for resubmission without starting over.

3.2 The BU Approver

Core Responsibility: To review a submitted document and take the next action in the workflow, which may include creating a new, related document.
Key Needs:

- Action-Oriented Dashboard: A clear, prioritized list of all documents awaiting their review.
- Informed Decisions: The ability to easily view the submitted form, all its attachments, and its history in one place.
- Workflow Progression: More than just "Approve/Reject." This user needs the ability to trigger the next step, which critically includes creating a new follow-on document (e.g., creating a "Purchase Order" based on an approved "Job Order").

3.3 The BU System Administrator

Core Responsibility: To configure and manage the Cascade system for their specific Business Unit.
Key Needs:

- User Management: Add new employees, deactivate accounts for leavers, and assign/modify user roles and permissions for users within their BU only.
- Form Management: Create, edit, and manage form templates that are unique to their BU's processes.
- Workflow Configuration: Build and adjust the multi-step approval workflows for their BU's forms as organizational structures change.
- Local Oversight & Support: Access a dashboard of all document activity within their BU to troubleshoot issues.

3.4 The Organization Admin (Akiva HQ)

Core Responsibility: To manage the overall structure, configuration, and security of the entire Cascade platform across all Business Units.
Key Needs:

- Business Unit Management: The ability to create, edit, or deactivate Business Units within the system as the corporate structure evolves.
- Top-Level User Management: The power to appoint (or revoke) the "BU System Administrator" role for each BU. While they can see all users, their primary user management task is managing the admins under them.
- Enforce Corporate Standards: Create and manage "Corporate Standard" form templates and workflows (e.g., the official Trade Requisition). They must have the ability to lock these templates to prevent modification by BU Admins, ensuring consistency across the entire conglomerate.
- Global Oversight: Access to a global dashboard to view system-wide activity down to the smallest detail in each BU.

3.5 The Data Processor / Accountant (Akiva HQ & BU)

Core Responsibility: To process the financial data from fully approved documents and ensure it is correctly entered into the SYSPRO ERP System. This role may exist at both the BU and HQ levels.
Key Needs:

- Dedicated Processing Queue: A clear view of all documents that are fully approved and ready for data entry/export.
- Flexible Data Export: The ability to filter documents (by date, BU, form type) and export the data into a pre-formatted Excel/CSV file that exactly matches the Syspro import template.
- Status Marking: The ability to mark a document as "Processed in Syspro" to remove it from the queue and complete its lifecycle in Cascade.
- Role-Based Access: The permissions for this role must be granular. A BU-level processor should only be able to access and export data for their own BU, while an Akiva HQ accountant may have global access.

4. Features and Requirements

This section translates the "needs" of the personas into specific product features.

4.1 Core Workflow & Document Management

This theme covers all the features that end-users, from Initiators to Approvers, will interact with on a daily basis. Its primary goal is to provide an intuitive and efficient user experience for the entire document lifecycle, from creation and submission to review and final approval, including the complex chained workflows that are central to Akiva's processes.

4.1.1 User Dashboards

A series of personalized pages that help the user navigate the forms they've submitted and their submissions that require immediate attention.

4.1.2 Form Creation & Submission

Users can select a form, fill out fields, upload attachments, and submit it into a predefined workflow.

4.1.3 Document Review & Action

Approvers can view a complete document, its attachments, and its history. They will have options to

- "Approve" moving up a step in the workflow
- "Reject" cancelling the request
- "Request Clarification" notifying the creator of the form to answer a comment
- "Return for Edits" sends back the request to the creator of the form to modify it

4.1.4 Chained Workflows

An approver's action can trigger the creation of a new, linked form (e.g., an approved "Job Order" allows the user to create a "Purchase Order" that pulls in relevant data).

- For example, if the person in charge of approving the "Job Order" is required to make the subsequent "Purchase Order", their dashboard will display this under the tasks the approver must do next
- The jump from one step to another ("Job Order" to "Purchase Order") must be automatic. They are part of the same workflow but are in different sections.

4.1.5 Comment System

A built-in comment thread on each document for users to ask questions, clarify points, and provide reasons for rejection. It must also support uploading attachments.

4.1.6 Real Time Chatting System

Similar to Facebook's Messenger where users can communicate privately with one another but also in group chats.

- Uploading of attachments like images and pdfs must be supported
- Original sender is cited when forwarding a message to a person or group

4.2 Administration & Configuration

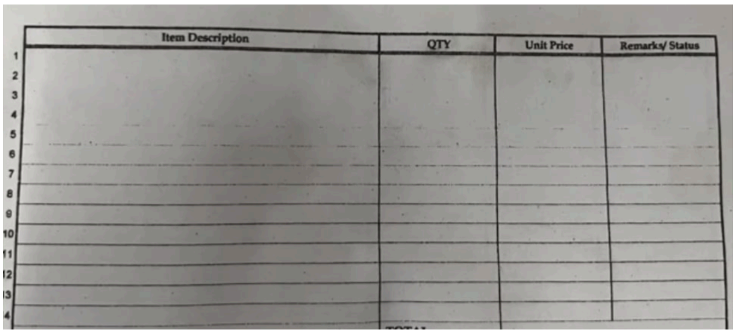
4.2.1 Multi-Tiered User Management

- Organization Admin: Can create BUs and assign/revoke BU Admin roles.
- BU Admin: Can add/remove users and assign roles within their specific BU.

4.2.2 Dynamic Form Builder

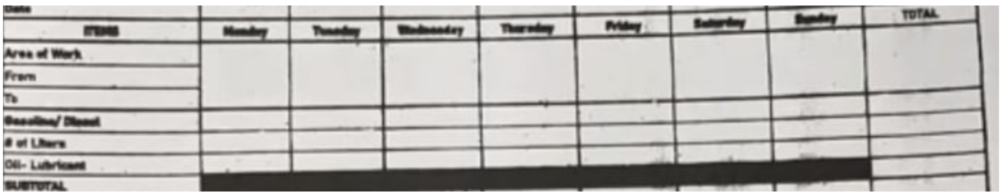
An interface for Admins to create and edit form templates with various field types similar to Google Forms.

- Questions are optional by default and can be marked to be required for submitting a form.
- Basic Form Types: Short answer, Long Answer, Number, Options, Checkboxes, Dropdown select, File Upload
- Repeating Form Types:
    - Repeater - There are defined columns and you can add row by row information



	Item Description	QTY	Unit Price	Remarks/ Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

    - Table - There are defined columns and rows and you can only fill in the cells



Date

ITEMS	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTAL
Area of Work								
From								
To								
Gasoline/ Diesel								
# of Liters								
Oil- Lubricant								
SUBTOTAL								

4.2.3 Workflow Engine

Admins can define multi-sectioned approval workflows, assign them to forms, and specify what action occurs at each step (e.g., simple approval vs. creating a chained document).

- An example of a workflow that could be inputted by an admin:

    Section 1:
    - Form attached "Job Order Form"
    - Initiator: Mechanics
    - Approval Steps:
        1. WIC approves
        2. AP approves

Section 2:

- Form attached “Purchase Order Form”
- Initiator: AP
- Approval Steps:
    1. Depot Supervisor
    2. Branch Accounting Head

Section 3:

- Form attached “Check Voucher”
- Initiator: AP
- Approval Steps:
    1. Finance Head
    2. Auditor (they approved meaning they placed it into SYSPRO)

Section 4:

- Form attached “MBOS”
- Initiator: Auditor
- Approval Steps:
    1. CFO

END OF REQUEST LIFECYCLE

- Each section is like its own approval flow and these individual flows are chained together to make the complete workflow for approval.
- Since they are all linked together, when viewing the form in one of the sections, all other forms and their data can be easily viewed alongside the current section’s
- In the scenario of “Request for Clarification”, the initiator and people who’ve already signed in the section will be notified to view (and hopefully answer) the comment thread of the form.
    - In the case that they also don’t know, the Initiator can send it back to the previous section for clarifications and those people will be notified on their dashboard
    - This can keep going until the original initiator from the very first section
- In the scenario of “Return for Edits”, initiators of the respective section that filled out the form will be notified
    - The “approvals” for the section will be reset
    - Upon completion of edits, the Initiator of the section will once again send it through approval
    - Like the “Request for Clarification” case, the Initiator of the section can also “Return for Edits” back to the initiator of the previous section
- In the scenario of “Rejected”, all people involved (those who’ve already signed and all initiators in each section) will be notified on their dashboards

4.2.4 Corporate Standards Control

- Organization Admins can create "locked" corporate forms and workflows that cannot be modified by BU Admins.
- The Organization Admins can then assign these “locked” corporate forms and workflows to the BUs that they’ve created.

4.3 Data & Integration

4.3.1 Data Processing Queue

- A dedicated view for System Data Processors / Auditors to see all documents that are fully approved and ready for export.
- BU Data Processors / Auditors can only see their respective BU's data.

4.3.2 Configurable Data Export

The ability to filter the processing queue and export data to an Microsoft Excel file whose columns are configured to match the Syspro import template.

4.3.3 Tagging

- Data Processors / Auditors on both System and BU levels can tag forms for filtering and export.
- These tags will only be seen by other Data Processors / Auditors

5. Currently Out of Scope

- Direct API integration with Syspro.
- Advanced analytics and reporting dashboards.
- Specialized Tools: Role-specific modules like a "budget checker" for Finance Heads.
- Batch Review Interface: A "rapid processing" mode for high-volume approvers.